

AMENDMENTS

Amendments to the Specification:

No amendments.

Amendments to the Claims:

1.(Currently Amended) A computer-implemented method for optimizing compression of a workload comprising a plurality of queries, the computer-implemented method comprising:

estimating a cost to execute each query within a plurality of queries of a workload;

automatically selecting a sub-set of queries from the workload, the sub-set of queries comprising one or more queries from the workload that together have a total estimated cost of execution less than or equal to ~~according to~~ a threshold level, the threshold level ~~being~~ comprising a ~~function~~ percentage of the total estimated cost to execute all the queries of the workload, the percentage comprising between about 40% and about 65%, wherein the queries of the workload are in decreasing rank order based on an estimated cost of execution for each query and selection of the sub-set of queries examines queries in the rank order from the higher estimated cost of execution toward the lower estimated cost of execution; and

compressing the selected sub-set of queries.

2. (Cancelled).

3. (Previously Presented) The computer-implemented method of claim 1 wherein the cost of execution is a function of a parameter selected from the group consisting of estimated execution time of each query, amount of computer memory required for execution of each query, amount of I/O usage required for execution of each query, amount of CPU utilization required for execution of each query, and throughput contribution required for execution of each query and combination thereof.

4. (Currently Amended) The computer-implemented method of claim 3 wherein the cost of execution is a function of one or more of:

- a frequency/weighting component associated with each query;
- an estimated time of execution for each query;
- an amount of computer memory required for execution of each query;
- an amount of I/O usage required for execution of each query;
- an amount of CPU utilization required for execution of each query; and ~~and~~,
- an amount of throughput contribution required for execution of each query.

5. (Currently Amended) The computer-implemented method of claim 1 wherein the threshold is derived from one or more of:

- a percentage of a total execution time of the workload;
 - an allotted execution time for the workload;
 - a determination made by applying successive approximation~~approximations~~ techniques;
- and
- a determination made when an allotted threshold selection time has been reached.

6. (Previously Presented) The computer-implemented method of claim 1 wherein selecting further comprises sub-dividing the plurality of queries into groups of queries based upon query types wherein the threshold applied to a group of queries is a percentage of a total estimated cost of execution for the group of queries.

7. (Previously Presented) The computer-implemented method of claim 6 wherein the threshold applied to a group of queries is derived from an allotted execution time for the group of queries.

8.(Currently Amended) A computer program product comprising a computer readable medium tangibly embodying computer executable code for optimizing compression of a workload comprising a plurality of queries, the computer programmed product comprising:

code estimating a cost to execute each query within a plurality of the queries of a workload;

code for automatically selecting a sub-set of queries from the workload, the sub-set of queries comprising one or more queries from the workload that together have a total estimated cost of execution less than or equal to ~~according to~~ a threshold level, the threshold level ~~being comprising a function~~ percentage of the total estimated cost to execute all the queries of the workload, the percentage comprising between about 40% and about 65%, wherein the queries of the workload are in decreasing rank order based on an estimated cost of execution for each query and selection of the sub-set of queries examines queries in the rank order from the higher estimated cost of execution toward the lower estimated cost of execution;

wherein the cost of execution is a function of one or more of:

a frequency/weighting component associated with each query;

an estimated time of execution for each query;

an amount of computer memory required for execution of a query;

an amount of I/O usage required for execution of a query;

an amount of CPU utilization required for execution of a query; and

an amount of throughput contribution required for execution of a query; and

code for compressing the selected sub-set of queries.

9. (Cancelled).

10. (Cancelled).

11. (Currently Amended) The computer programmed product of claim 8 wherein the threshold is derived from one or more of:

a percentage of a total execution time of the workload;

an allotted execution time for the workload;

a determination made by applying successive ~~approximation~~approximations techniques;
and

a determination made when an allotted threshold selection time has been reached.

12. (Original) The computer programmed product of claim 8 wherein the step of selecting further comprising sub-dividing the plurality of queries into groups of queries based upon query types wherein the threshold applied to a group of queries is a percentage of a total estimated cost of execution for the group of queries.

13. (Original) The computer programmed product of claim 12 wherein the threshold applied to a group of queries is derived from an allotted execution time for the group of queries.

14. (Currently Amended) For a database management system to be operatively coupled to a data processing system, a workload compression system for optimizing compression of a workload comprising a plurality of queries, the workload compression system comprising:

means for estimating a cost to execute each query within a plurality of the queries of a workload;

means for automatically selecting a sub-set of queries from the workload, the sub-set of queries comprising one or more queries from the workload that together have a total estimated cost of execution less than or equal to ~~according to~~ a threshold level, the threshold level ~~being comprising a function~~ percentage of the total estimated cost to execute all the queries of the workload, the percentage comprising between about 40% and about 65%, wherein the queries of the workload are in decreasing rank order based on an estimated cost of execution for each query and selection of the sub-set of queries examines queries in the rank order from the higher estimated cost of execution toward the

lower estimated cost of execution;

wherein selecting comprises sub-dividing the plurality of queries into groups of queries based upon query types wherein the threshold applied to a group of queries is a percentage of a total estimated cost of execution for the group of queries;

wherein the cost of execution is a function of one or more of:

a frequency/weighting component associated with each query;

an estimated time of execution for each query;

an amount of computer memory required for execution of each query;

an amount of I/O usage required for execution of each query;

an amount of CPU utilization required for execution of each query; and

an amount of throughput contribution required for execution of each query

and

means for compressing the selected sub-set of queries.

15. (Cancelled).

16. (Cancelled).

17. (Currently Amended) The workload compression system of claim 14 wherein the threshold is derived from one or more of:

a percentage of a total execution time of the workload;

an allotted execution time for the workload;

a determination made by applying successive ~~approximation~~ approximations techniques;

and

a determination made when an allotted threshold selection time has been reached.

18. (Cancelled).

19. (Original) The workload compression system of claim 18 wherein the threshold applied to a group of queries is derived from an allotted execution time for the group of queries.